



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/563,130

01/03/2006

Joachim Karthaus

034279-018

8036

21839 7590 07/31/2009  
BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

PENG, KUO LIANG

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

07/31/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,130	<b>Applicant(s)</b> KARTHAUSER, JOACHIM	
	<b>Examiner</b> Kuo-Liang Peng	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4/15/09 Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 and 48-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-44 and 49-51 is/are allowed.
- 6) ☒ Claim(s) 45,46,48,52 and 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The Applicants' amendment filed April 15, 2009 is acknowledged. Claim 47 is deleted. Claims 4, 6-7 and 45 are amended. Now, Claims 1-46 and 48-53 are pending.
2. Claim objection(s) in the previous Office Action (Paper No. 20081011) is/are removed.
3. Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 20081011) is/are removed.
4. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

### ***Claim Rejections - 35 USC §102/103***

5. Rejection of Claims 45-46 and 48 under 35 USC 102(b) as anticipated by or, in the alternative, 35 USC 103(a) as being unpatentable over Sulc (WO 98/40425)

is maintained because the rejection is adequately set forth in paragraph 7 of Paper No. 20081011. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 13, last paragraph bridging to page 14, 1<sup>st</sup> paragraph), the arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965) Applicants' assertion that it will be practically impossible to remove all of the organic solvent without damaging the material is merely an opinion, not evidence.

For Applicants' argument (Remarks, page 14, 2<sup>nd</sup> paragraph), Examiner disagrees. Sulc teaches that the compact polymer or particles are **contiguous** to each other albeit they are [phase] separated from the hydrophobic phase (e.g., the polysiloxane) (page 3, line 26 to page 4, line 20 and page 6, lines 23-29) (Emphasis added) As such, clearly Sulc's composite material is an IPN.

6. Rejection of Claims 45-46 under 35 USC 102(b) as anticipated by or, in the alternative, 35 USC 103(a) as being unpatentable over Wang (US 2002 0052448) is maintained because the rejection is adequately set forth in paragraph 8 of Paper No. 20081011. Applicant's arguments have been fully considered but they are not

persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (page 14, 5<sup>th</sup> paragraph), Examiner disagrees. First, as Applicants correctly pointed out that a solvent is not required for preparing the composite material. ([0024]) As such, the argument of "no practical solutions are provided" is irrelevant. Second, the arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965) The alleged impossibility of swelling a silicone to incorporate a continuous network without an organic solvent is merely an opinion, not evidence. Especially, when the monomer for preparing the continuous network simultaneously function as a solvent (i.e., a "reactive" solvent), the whole reaction system is considered as solventless. As such, there are no residues of organic solvent.

7. Rejection of Claims 45-46, 48 and 52-53 under 35 USC 102(b) as anticipated by or, in the alternative, 35 USC 103(a) as being unpatentable over Finberg (EP 315 836) is maintained because the rejection is adequately set forth in paragraph 9 of Paper No. 20081011. Applicant's arguments have been fully

considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 15, 3<sup>rd</sup> paragraph), Examiner disagrees because an IPN lacking internal stress is not claimed. As such, the assertion of Finberg could not be used or modified to provide the claimed IPN is clearly not persuasive.

*Allowable Subject Matter*

8. Claims 1-44 and 49-51 are allowed.

9. The following is an examiner's statement of reasons for allowance:

The present claims are allowable for at least the following reason(s) over the closest references: Sulc, Wang, Finberg and Halloran (US 5 085 859).

Sulc and Wang does not teach or fairly suggest a) the method set forth in Claim 1 where the monomer is **precipitated** in the silicone matrix before polymerization; and b) the articles set forth in Claims 49-51. Notably, the **precipitation polymerization** taught in Sulc (Abstract) refers to a polymerization where the **resulting polymer** is no longer compatible with the monomers and is

Art Unit: 1796

precipitated out becoming a separate phase. The monomers do not precipitate out in the matrix.

Halloran discloses an IPN of polysiloxane and a polymer derived from monomers such as acrylate, N-vinylpyrrolidone, etc. The IPN can be present in a liquefied solvent such as a supercritical carbon dioxide, etc. (col. 4, lines 8-49 and col. 8, lines 18-68) However, Halloran does not teach or fairly suggest that the IPN is derived from the polymerization of the monomers in the presence of the supercritical carbon dioxide, etc. Therefore, Halloran does not teach or fairly suggest a method of preparing an IPN where the polymerization of the monomers is carried out in the presence of a supercritical fluid, let alone, the control of the supercritical fluid polymerization such that the monomers are precipitated in the silicone rubber matrix before polymerization.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed

Art Unit: 1796

within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about



Art Unit: 1796

the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp  
July 23, 2009

/Kuo-Liang Peng/  
Primary Examiner, Art Unit 1796